AMENDMENTS TO THE CLAIMS

1-22. (Cancelled).

23. (Currently amended) A method of treating ~~a disease or disorder in a body area~~ bone fracture non-union or segmental bone defects, where bone regeneration is required ~~to ameliorate said disease or disorder~~, in an immunocompetent subject, said method comprising administering directly to a skeletal muscle, of ~~said body area~~ the subject, adjacent to said fracture or defects a therapeutically effective amount of a first nucleic acid molecule comprising an adeno-associated viral vector [[and]] carrying a first promoter, and a second nucleic acid molecule comprising an adenoviral vector [[and]] carrying a second promoter, wherein the first and second promoters are each operably linked to a nucleotide sequence that encodes the amino acid sequence of SEQ ID NO:2[[,]]

~~wherein said disease or disorder is selected from the group consisting of bone fracture non-union, segmental bone defects, spinal fusion, periodontal disease, degenerative disc disease, and growth plate injury~~.

24. (Original) The method of claim 23, wherein said first promoter and/or said second promoter is a promoter of bone morphogenetic protein.

25. (Previously Presented) The method of claim 23, wherein said first promoter and/or said second promoter is a CAG promoter comprising a chicken beta-actin promoter and a human cytomegalovirus enhancer.

26. (Previously presented) The method of claim 23, wherein said first and second nucleic acid molecules are administered concurrently.

27-29. (Cancelled).

30. (Currently amended) The method of claim 23 [[or 29]], wherein the adenoviral vector is administered at an amount that is non-toxic and non-immunogenic in the subject.

31. (Cancelled).

32. (Currently amended) The method of claim [[13,]] 23[[or 29]], wherein the subject is a human.

33-47. (Cancelled).